

## Stages and Georgia Special Education

### OVERVIEW

Stages includes two major software components: (a) informal assessment software and (b) curriculum software. Stages informal assessment software is instructional in nature, providing activities with constructive feedback and opportunities for the learner to explore and choose. Stages curriculum software is a collection of interactive daily instructional programs appropriate for learners at each Stage.

Stages software enhances Georgia's special education program because:

- 1. Stages aligns with the Georgia Education Core Curriculum Standards in Mathematics and Language Arts.**
- 2. Stages generates records of learner performance.**
- 3. Stages provides learners with the opportunity for increased independence.**
- 4. Stages assists the learner's IEP team with selecting assistive technology and assessment tools.**

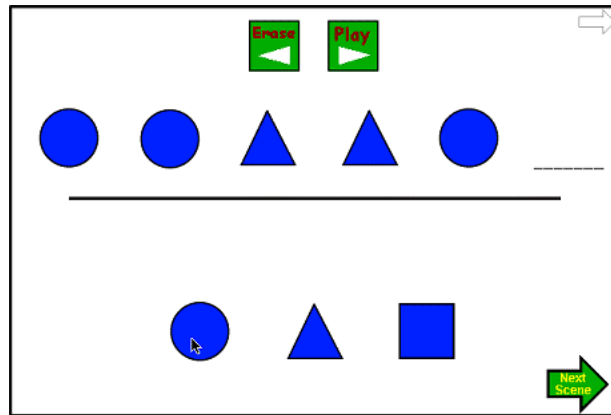
#### **1. Stages aligns with the Georgia Education Core Curriculum Standards in Mathematics and Language Arts.**

Stages ensures meaningful and effective access to general curriculum areas for learners who require modifications in order to participate in statewide assessment. The learner's IEP team can also use Stages to help determine if alternate assessment is appropriate by providing benchmarks of learner progress in Math and Language Arts general curriculum areas. Please refer to the section of this document entitled "How Stages Correlates with Georgia Quality Core Curriculum Standards" for detailed matching.

#### **2. Stages generates records of learner performance.**

During Stages software activities, the instructor can print directly from any screen to capture a learner-generated product as a benchmark. At the end of each activity, a report with instructional data about the time spent, choices made, response accuracy or work product, input method, prompt type, and time/date stamp are displayed with the learner's name. The instructor may wish to then print that screen or save the information as a text-format electronic file.

Observation guidelines and forms in the Stages kits help the instructional team make the most out of an activity session. The data-gathering features of the software enable the observer to focus on noting the learner's behavior and thinking-out-loud responses. Two adults from the instructional team can work together: one adult can encourage the learner and the other can note valuable data about behaviors without being noticed by the learner. Alternatively if a video or still camera is available, it may be directed at the learner and the computer monitor to discreetly record interactions and other behaviors while one adult coaches. During the sessions, the learner will be less conscious of her performance being recorded, making her responses more candid. Over time, the collected data will provide evidence that the instructional team needs to build a complete picture of the learner's skill achievement.



*Example screen shot from Stage Four: Create Patterns*

**3. Stages provides learners with the opportunity for increased independence.**

The feedback in Stages activities is encouraging and rewarding, providing a relaxed setting for exploring topics and demonstrating skills with minimal supervision. Many Stages activities include accessible choice-making opportunities. Functional skills activities include real-life community settings.

**4. Stages assists the learner's IEP team with selecting assistive technology and assessment tools..**

An objective of Stages software is to provide several options for input methods and other settings so that the learner's instructor, parents, and others in the IEP team can determine his ideal learning and communication environment. Different devices, auditory feedback, speeds and prompts are among the variables.

## SUMMARY

Stages augments the Georgia assessment cycle for special education. The Stages software is a comprehensive benchmark tool to assist the instructional team in collecting valuable information on learner skill achievement, determine assessment strategy, and discover the learner's abilities and thinking approach.

## How Stages Correlates with Georgia Quality Core Curriculum Standards<sup>1</sup>

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### Mathematics - 3<sup>rd</sup> Grade

**Strand:** Whole Number Computation; Estimation; Whole Number Operations

**1**      **Topic:** Estimation

**Standard:** Applies estimation strategies beginning with front-end estimation and simple compatible numbers to predict appropriate results.

***Related Stages Assessment Activities:***

*Stage Four:*      *Math Readiness:* Estimation

*Stage Five:*      *Problem Solving:* Number Guess

- Stage Four *Estimation* gives the learner an opportunity to demonstrate knowledge of vocabulary to describe relative quantity such as ‘more/less’ or ‘many/few.’
- Stage Five *Number Guess* applies the learner’s knowledge of numbers to a deductive reasoning game.

**Strand:** Number Sense & Numeration; Fractions & Decimals

**[3]**      **Topic:** Fractions

**Standard:** Identifies and writes fractions to describe parts of a whole using both regions and discrete sets (halves, thirds, fourths, sixths, eighths, and tenths).

**[4]**      **Topic:** Fractions

**Standard:** Compares fractions with like denominators and explores comparison of fractions with unlike denominators using models.

***Related Stages Assessment Activities:***

*Stage Five:*      *Math:* Fractions

- Stage Five *Fractions* includes parts of whole objects (regions) and parts of groups (sets) of objects. The multiple choice questions ask the learner to distinguish fractions with like and unlike denominators.

**Strand:** Geometry & Spatial Sense; Measurement

**[5]**      **Topic:** Geometric Shapes

**Standard:** Recognizes properties (such as sides and angles) of geometric shapes (such as triangles, rectangles, circles, squares, and closed and not closed figures) and recognizes and names solid figures (such as cylinders, cones, spheres, and cubes).

***Related Stages Assessment Activities:***

*Stage Four:*      Shape ID

*Stage Five:*      *Problem Solving:* Mystery Shape

- The learner demonstrates recognition of triangles, rectangles, circles, squares, and ovals in photographs and drawings in scenes and in isolation (blank background).
- Stage Five *Mystery Shape* applies the learner’s knowledge of shape attributes to a deductive reasoning game.

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<sup>1</sup> Information from Georgia Quality Core Curriculum Standards, by standard.  
Source: <http://www.glc.k12.ga.us> (Accessed June 6, 2002).

**9 Topic: Geometry**

**Standard:** Identifies geometric relations, [geometric transformations, and line of symmetry].

**Related Stages Assessment Activities:**

*Stage Four: Math Readiness: Estimating*

- Stage Four *Estimating* gives the learner an opportunity to demonstrate understanding of relative size vocabulary such as ‘shorter’, ‘longer’, ‘small’, and ‘large’.

**12 Topic: Measurement**

**Standard:** Measures using concrete materials such as string to find perimeter and circumference; squares or tiles to find area; and cubes to find volume. Determine perimeter by adding lengths of sides.

**Related Stages Assessment Activities:**

*Stage Five: Math: Geometry*

- Stage Five *Geometry* asks the learner questions about perimeter, area, and volume with the help of on-screen diagrams showing non-conventional units such as footsteps, tiles, and cubes.

**14 Topic: Money**

**Standard:** Determines and estimates amounts of money up to \$5.00. Include amounts spent, change received, and equivalent amounts.

**Related Stages Assessment Activities:**

*Stage Six: Assess: Counting Money, Money Equivalents*

- Stage Six *Money* activities relate money amounts to situations of daily living.

**15 Topic: Time**

**Standard:** Tells time to the minute [and measures elapsed time,] and measures time before and after the hour.

**Related Stages Assessment Activities:**

*Stage Six: Assess: Telling Time*

- Both analog and digital clocks are included in this activity.

**Strand:** Number Sense & Numeration; Fractions & Decimals

**17 Topic: Number Names**

**Standard:** Translates words to numerals and numerals to words [up to 9,999].

**Related Stages Assessment Activities:**

*Stage Four: Math Readiness: Number ID*

- Numbers from 0 to 10 are included in the Stage Four *Number ID* activities. Numbers are assessed in the context of a telephone and an elevator to build skills for learner independence.

**Strand:** Problem Solving

**34 Topic:** Problem Solving

**Standard:** Selects appropriate operation (addition, subtraction, or multiplication) for a given problem situation.

**Related Stages Assessment Activities:**

*Stage Five: Math: Word Problems (+, -, x, ÷)*

- These activities give the learner an opportunity to demonstrate mastery of the four basic arithmetic operations with and without the aid of diagrams on the screen.

**[35] Topic:** Problem Solving

**Standard:** Employs problem-solving strategies (e.g. draw a picture; make a chart, graph, or table; guess and check; look for a pattern).

**Related Stages Assessment Activities:**

*Stage Four: Math Readiness: Explore Patterns, Continue/Fill-In Patterns, Create Patterns*

*Stage Five: Problem Solving: Number Guess*

- Stage Four *Patterns* activities introduce the learner to patterns using shapes, color, and sound, have them continue patterns, and allow them to generate their own patterns.
- *Number Guess* is a way for learners to demonstrate deductive reasoning skills by guessing a mystery number using feedback from the computer (that number is too high/low).

**[36] Topic:** Problem Solving

**Standard:** Solves one- [and two-] step word problems related to appropriate third grade objectives. Includes oral and written problems and problems with extraneous information as well as information from sources such as pictographs, bar graphs, tables, and charts.

**Related Stages Assessment Activities:**

*Stage Five: Math: Word Problems (+, -, x, ÷)*

- *Word Problems* in Stage Five include questions with and without graphical aids.

**Strand:** Statistics & Probability

**39 Topic:** Graphs

**Standard:** Collects, reads, interprets, and compares data in charts, tables, and graphs.

**Related Stages Assessment Activities:**

*Stage Five: Math: Charts and Graphs*

- The Stage Five *Charts and Graphs* activity includes bar graphs, line graphs, and pie charts.

**Strand:** Whole Number Computation; Estimation; Whole Number Operations

[42] **Topic:** Multiplication and Division

**Standard:** Relates concrete and pictorial models to multiplication and division.

[44] **Topic:** Multiplication and Division

**Standard:** Determines basic multiplication and division facts through  $9 \times 9$  by using strategies such as skip-counting, multiplying by zero and one, dividing by one, splitting arrays, commutative property of multiplication, and using known facts to find unknown facts.

48 **Topic:** Multiplication

**Standard:** Recalls basic multiplication facts through  $9 \times 9$ .

**Related Stages Assessment Activities:**

Stage Five: *Math:* Math Facts ( $\times$ ,  $\div$ ), Word Problems ( $\times$ ,  $\div$ )

- The Stage Five *Math Facts* activity asks the learner to perform the basic operations of multiplication of two single-digit numbers and division without remainders. The *Word Problems* activity asks the learner to solve problems with or without the aid of an illustration.

[47] **Topic:** Addition and Subtraction

**Standard:** Adds and subtracts whole numbers (one-, two- and three-digits, without or with regrouping), [initially using manipulatives and then connecting the manipulations to symbolic procedures].

**Related Stages Assessment Activities:**

Stage Five: *Math:* Math Facts (+, -), Word Problems (+, -)

- The Stage Five *Math Facts* activity asks the learner to perform the basic operations of addition and subtraction with and without regrouping. *Word Problems* give the learner the chance to demonstrate the ability to determine the correct operation to use before making a calculation.

**Strand:** Patterns & Relationships; Algebra

52 **Topic:** Patterns

**Standard:** [Describe,] extend, and make generalizations about geometric [and numeric] patterns.

**Related Stages Assessment Activities:**

Stage Four: *Math Readiness:* Explore Patterns, Continue/Fill-In Patterns, Create Patterns

- The Stage Four *Patterns* activities give the learner an opportunity to discover patterns using on-screen manipulatives in preparation for work with number patterns.

## Language Arts - 3<sup>rd</sup> Grade

**Strand:** Oral Communication

**2 Topic:** Listening/Speaking

**Standard:** Listens and responds to a variety of literary forms.

***Related Stages Assessment Activities:***

*Stage Two: All Activities*

*Stage Six: Stories:* Cody, Mitchell, Meg, Adam, Ryan

- Stage Two exposes the learner to language using short rhyming passages about familiar things such as animals and foods.
- The Stage Six *Stories* are about people of different ages doing activities of daily living such as work, recreation, and travel.

**3 Topic:** Listening/Speaking

**Standard:** Follows multiple oral directions.

**16 Topic:** Reading [from Written Communication Strand]

**Standard:** Follows written directions.

***Related Stages Assessment Activities:***

*Stage Five: All 'Explore' Activities*

- The learner attends to verbal and written instructions in order to learn how to solve problems or explore new vocabulary.

**Strand:** Written Communication

**17 Topic:** Reading

**Standard:** Reads a variety of materials for information and pleasure.

**31 Topic:** Reading

**Standard:** Demonstrates comprehension when reading a variety of literary forms (e.g., fiction, nonfiction, poetry, and drama).

***Related Stages Assessment Activities:***

*Stage Five: Reading:* Sounds, Meaning

- Stage Five *Sounds* highlights spelling patterns to emphasize the rhyming final sounds of words. The activity gives the learner short rhyming sentence pairs with simple animations. The screen displays text while audio plays. The learner then has a chance to identify the rhyming word pairs from a word wall. The *Meaning* activity presents the learner with Dolch words. The learner selects the picture in a scene that illustrates the meaning of the word.

**36 Topic:** Writing

**Standard:** Uses correct spelling for frequently used sight vocabulary.

**37 Topic:** Writing

**Standard:** Uses learned phonetic strategies to spell correctly.

***Related Stages Assessment Activities:***

*Stage Seven: Making Words: High Frequency Words, Rhyming words*

- The *High Frequency Words* activity presents a short passage missing words from the following list: *the, of, and, a, to, in, is, you, that, and it*. The *Rhyming Words* activity shows the learner a series of pairs of rhyming sentences, and then asks the learner to complete the sentences with the correct rhyming words. In both activities, the learner types or uses an on-screen keyboard to enter the correct word.

**38 Topic:** Writing

**Standard:** Correctly forms letters and numbers; Correctly spaces words and sentences.

***Related Stages Assessment Activities:***

*Stage Four: Reading Readiness: Letter ID*

*Math Readiness: Number ID*

- Stage Four *Letter ID* presents the learner with letters using simple animations. The learner identifies upper and lower case letters when presented with prompts. Learners who are not able to use a writing instrument can select the correct number in *Number ID* given a verbal and number-word prompt.

**39 Topic:** Writing

**Standard:** Writes a short paragraph about a topic.

**40 Topic:** Writing

**Standard:** Writes about self-selected topics.

***Related Stages Assessment Activities:***

*Stage Seven: Making Stories*

- The learner independently selects a picture as a writing prompt in this activity, or can import a custom photograph.

**42 Topic:** Writing

**Standard:** Applies correct principles of grammar, parts of speech, and usage and mechanics:

***Related Stages Assessment Activities:***

*Stage Seven: Making Sentences: Building Sentences, Writing Sentences, Spelling and Grammar.*

- *Building Sentences* gives the learner an opportunity to demonstrate knowledge of sentence structure without requiring typing skills. The activity is a collection of three levels of word walls with text-to-speech capability. *Writing Sentences* is another unstructured activity. The instructor can provide instructions or prompts for each sentence. *Spelling and Grammar* is a collection of different activities including: Spelling, Homonyms, Capitalization, Noun-Verb Agreement, Pronoun Use, Word Order, and a Custom option.



**44**      **Topic:** Writing

**Standard:** Uses available technology to assist in writing.

***Related Stages Assessment Activities:***

*Stage Seven:    All Activities*

- All Stage Seven activities that ask the learner to produce written expression are accessible by many input devices, such as touchscreen, mouse dwell, alternative keyboard and switch.

**51**      **Topic:** Reference/Study

**Standard:** Alphabetizes words to the third letter.

***Related Stages Assessment Activities:***

*Stage Five:      Reading: Letters (Alphabetizing)*

- Stage Five *Letters* consists of two alphabetizing activities. The activity on the easier level asks the learner to alphabetize based on first letter only. The more difficult activity asks the learner to alphabetize words to the second and third letter.